Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1.   (original):   A method for dynamic retransmission of transactions in a multi-processor computer architecture, comprising:

at a source node in the computer architecture, the source node comprising a retransmit buffer, designating a transaction for transmission to a destination node in the computer architecture, the destination node comprising a receive buffer, wherein the transaction is designated for transmission over a first path in a first flow control class;

retrieving a transaction identification (TID) for the designated transaction;

comparing the retrieved TID for the designated transaction to TIDs in the transmit buffer, wherein if the comparison does not show a match:

attaching the retrieved TID to the designated transaction,

placing the designated transaction in the retransmit buffer, and

sending the designated transaction to the destination node; and

wherein if the comparison shows a match, transmitting the designated transaction over a second path.

2.   (original):   The method of claim 1, wherein the designated transaction in the retransmit buffer times out, comprising:

retrieving a TID of a most recent transaction sent to the destination node along the first path;

sending a probe request to the destination node along the second path, the probe request including a TID of the timed-out transaction and the TID of the most recent transaction;

deconfiguring the first path; and

updating the TID in the retransmit buffer.

3.   (original):   The method of claim 2, wherein the destination node receives the probe request, the method at the destination node, comprising:

determining a TID for a most recent transaction entry in the receive buffer for a

transaction from the source node along the first path and the first flow control class; and

determining:

if the TID for the most recent transaction entry in the receive buffer equals the

timed-out transaction TID.

4.   (original):   The method of claim 3, wherein the TIDs are not equal, further

comprising designating an error condition.

5.   (original):   The method of claim 3, wherein the TID are equal, further comprising:

sending a probe response to the source node along the second path;

indicating to the source node if the timed-out transaction is received at the destination

node; and

sending the source node the most recent TID acknowledged.

6.   (original):   The method of claim 5, wherein the source node receives the probe

response, comprising resuming transmission for all transactions in the retransmit buffer for

which an acknowledgement has not been received.

7.   (original):   The method of claim 5, further comprising:

sending a plunge transaction to the destination node over the first path, the plunge

transaction indicating a TID for retransmission of transactions should the first path be

reconfigured; and

updating the TID.

8.   (original):   The method of claim 7, wherein the destination node receives the

plunge transaction, the method at the destination node, comprising:

determining if the first path is deconfigured from the source node; and

if the first path is deconfigured from the source node, sending a plunge response to the

source node over the first path.

9.   (original):   The method of claim 8, wherein the destination node determines that

the first path is not deconfigured, wherein an error condition exists, comprising:

informing the source node; and

deconfiguring the first path from the destination node.

10. (original): The method of claim 8, further comprising:

receiving the plunge responses; and

reconfiguring the first path from the source node.

11. (original): The method of claim 2, wherein the probe request times out, comprising:

determining if a third path is available;

if the third path is available:

sending a second probe response along the third path,

deconfiguring the second path, and

updating the TID in the retransmit buffer; and

if the third path is not available, designating an error condition.

12. (original): The method of claim 1, wherein the destination node receives the designated transaction over the first path, the method at the destination node, comprising:

determining if the first path is configured;

determining from the receive buffer a TID from a most recent transaction from the source node along the first path in the first flow control class;

comparing the TIDs of the designated transaction and the most recent transaction to determine if the most recent transaction is in default; and

if the most recent transaction is not in default, adding an entry to the receive_TID table.

13. (original): The method of claim 12, wherein the most recent transaction is in default, comprising dropping the transaction.

14. (original): The method of claim 13, wherein the first path is configured, comprising:

accepting the transaction;

entering the TID of the transaction receive_TID table; and

sending an acknowledgement to the source node along the first path.

15.   (original):   The method of claim 14, further comprising:

waiting for a time period slightly less than N times the time of flight, wherein N equals 3 to 4; and

invalidating the entry in the receive_TID table.

16.   (original):   An apparatus for retransmission of transaction in a multi-processor computer architecture, comprising:

a source node having a retransmit buffer, wherein the source node stores transactions transmitted from the source node;

a send_TID table comprising a transaction identification (TID) for each transaction sent from the source node;

a destination node comprising a receive buffer, wherein the destination node stores transactions transmitted from the destination node;

a receive_TID table comprising a TID for each transaction sent from the destination node, wherein the source node sends normal transactions to the destination node and the destination node sends acknowledgements for the normal transactions to the source node, wherein if the source node does not receive an acknowledgement within a specified time, a corresponding normal transaction in the retransmit buffer times out; and

a probe transaction, whereby the source node queries the destination node for a timed-out transaction.

17.   (original):   The apparatus of claim 16, wherein the probe transaction comprises a TID of the timed-out transaction and a TID of a TID of a last transaction pending in the retransmit buffer, wherein the source node comprises:

means for deconfiguring the first path; and

means for updating the TID in the receive_TID table.

18.   (original):   The apparatus of claim 17, wherein the destination node receives the probe transaction, the destination node, further comprising:

means for determining a TID for a most recent transaction entry in the receive buffer; and

means for determining if the TID for the most recent transaction entry in the receive buffer equals the timed-out transaction TID.

19.   (currently amended): The apparatus of claim 18, wherein if the TIDs are equal ~~either (a) or (b) are met~~, the destination node:

sends a probe response to the source node along the second path;

indicates to the source node if the timed-out transaction is received at the destination node; and

sends the source node the most recent TID acknowledged.

20.   (original):   The apparatus of claim 19, wherein the source node receives the probe response, wherein the source node comprises means for resuming transmission for all transactions in the retransmit buffer for which an acknowledgement has not been received.

21.   (original):   The apparatus of claim 18, wherein the TIDs are not equal, further comprising means for designating an error condition.